

Species Tag:	17002	Species Name:	NH3
Version:	3		Ammonia
Date:	Jan. 1984		
Contributor:	R. L. Poynter		
Lines Listed:	446	Q(300.0)=	579.029
Freq. (GHz) <	9497	Q(225.0)=	378.443
Max. J:	19	Q(150.0)=	207.109
LOGSTR0=	-15.2	Q(75.00)=	74.559
LOGSTR1=	-11.0	Q(37.50)=	27.606
Isotope Corr.:	0.	Q(18.75)=	11.251
Egy. (cm <sup>-1</sup> ) >	0.4	Q(9.375)=	5.398
$\mu_a$ =	0	A=	B
$\mu_b$ =	0	B=	298117.06
$\mu_c$ =	1.476	C=	186726.36

The computational method and most of the microwave data are given in R. L. Poynter and R. K. Kakar, 1975, *Astrophys. J. Suppl.* **29**, 87. Additional microwave transitions have been reported by B. V. Shinha and P. D. P. Smith, 1980, *J. Mol. Spect.* **80**, 231. The rotational transitions and energy levels were taken from R. Poynter and J. S. Margolis, 1983, *Mol. Phys.* **48**, 401. The analysis was based on a very extensive set of accurate  $\nu_2$  measurements reported by R. Poynter and J. S. Margolis, 1984, *Mol. Phys.* **51**, 393, and upon a series of ‘forbidden’ transitions in the  $\nu_4$  band, reported by E. A. Cohen, W. H. Weber, R. L. Poynter, and J. S. Margolis, 1983, *Mol. Phys.* **50**, 727. The work of Cohen *et al.* allowed the C,  $D_K$ ,  $H_K$ , and  $L_K$  constants to be determined, thus fixing the energy level scale. The  $J = 1 \rightarrow 0$ ,  $K = 0$  rotational transition was taken from P. Helminger, F. C. De Lucia, and W. Gordy, 1971, *J. Mol. Spect.* **39**, 94. Because of the important applications of these rotational lines, the upper frequency limit has been extended to 335 cm<sup>-1</sup> (9.5 THz). Hyperfine splittings have not been included.